

FIG. 1

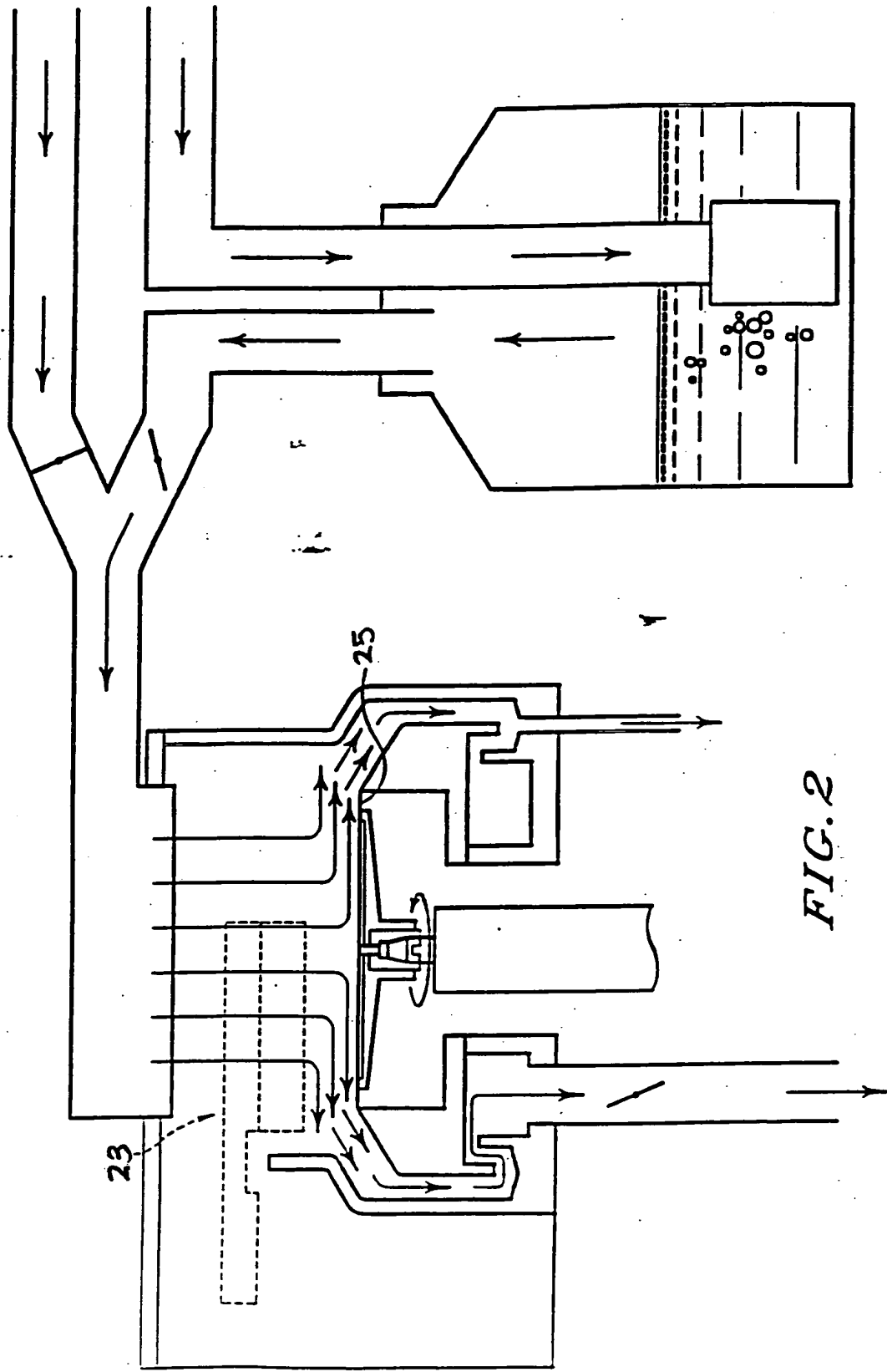


FIG. 2

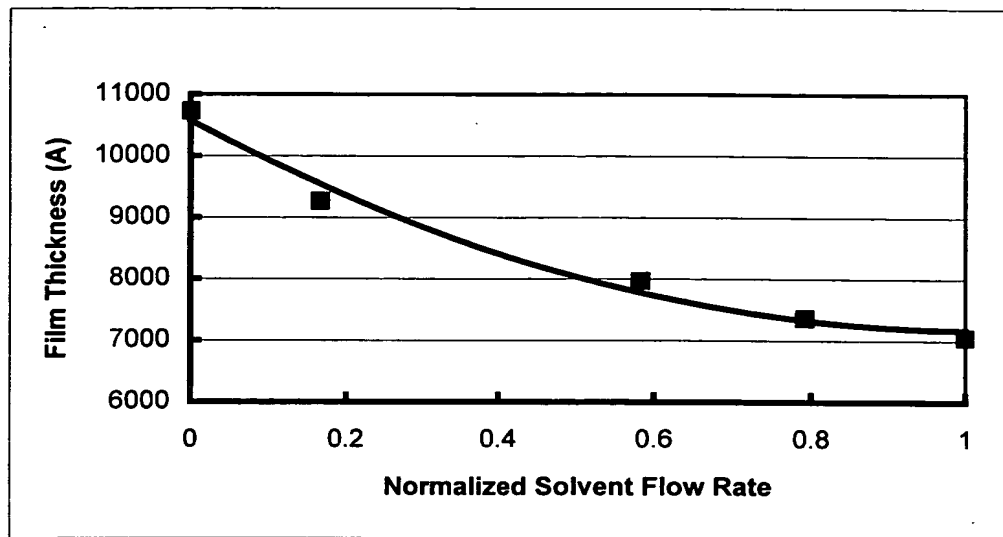


Figure 3a) Mean resist film thickness as a function of solvent concentration at a fixed drying spin speed . Mean film thickness can be varied close to 4000Å by varying the solvent concentration at a fixed 2000 rpm.

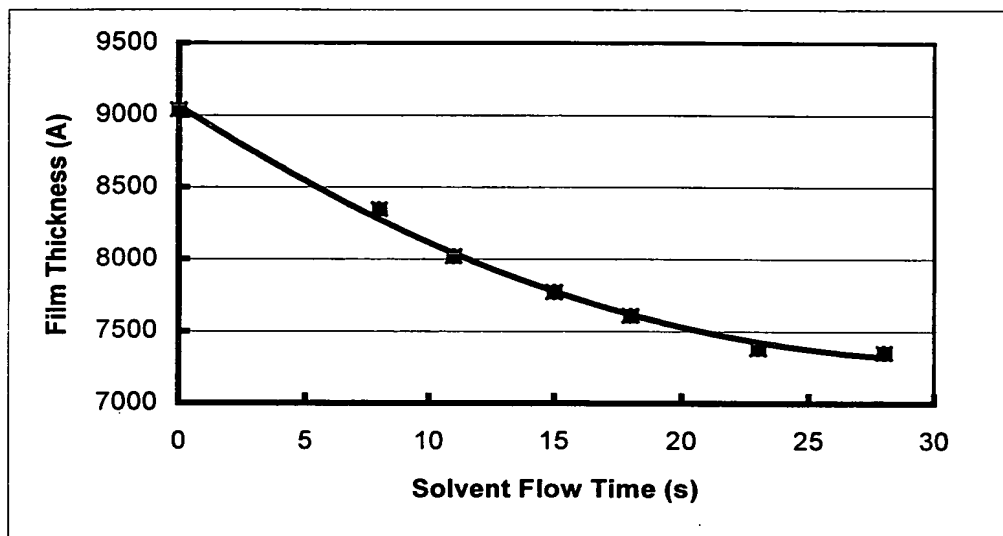


Figure 3b): Film thickness as a function of solvent flow time for a working example.

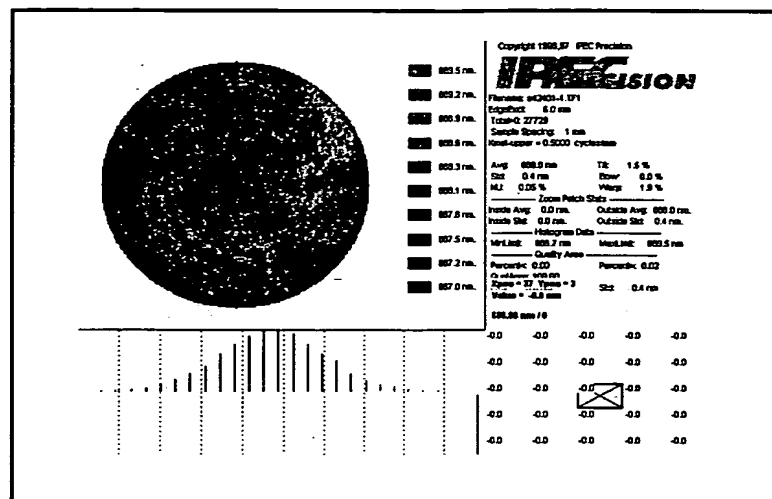
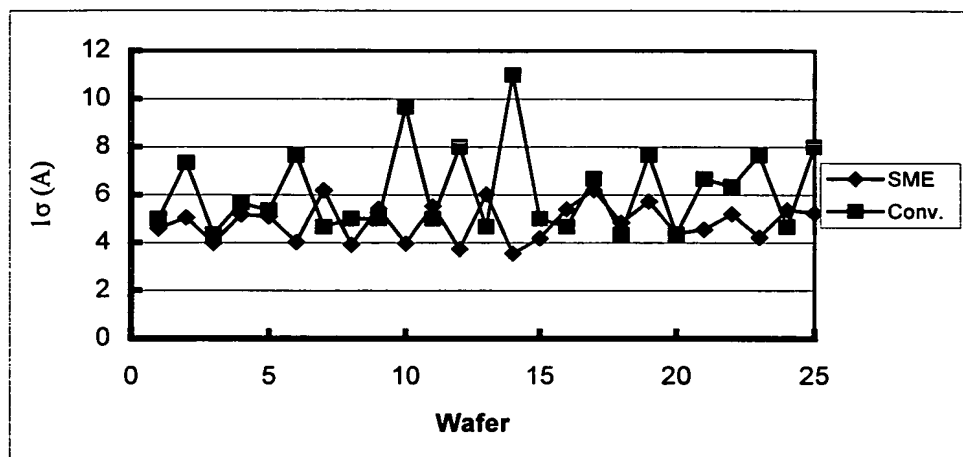


Figure 4: A typical film thickness profile, as measured by 30,000 pts film thickness measurement tool, has a 1σ uniformity of 4\AA (0.045%) for 8880\AA target thickness.



	Conventional Coater	Invention
$1\sigma_{ave}$	5.67A	4.86A
$1\sigma_{band}$	4.5A	2.2A

Figure 5) Film uniformity comparison between the invention (SME) and conventional spin coaters.

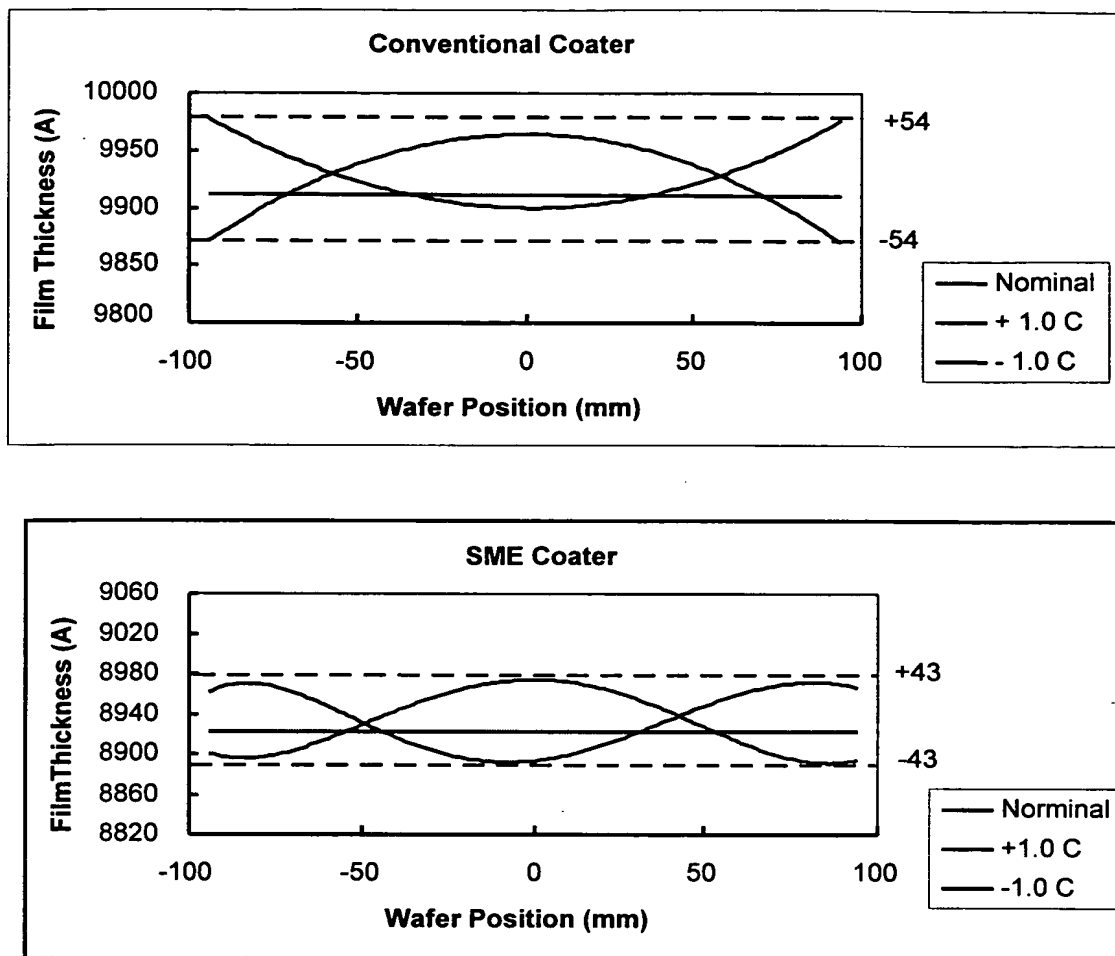


Figure 6: Resist temperature latitude comparison between the invention (SME) and conventional coaters for 200mm wafers. The SME coater resist temperature latitude of film uniformity is 36% wider than that of a conventional coater.

TOP SECRET 98/56860

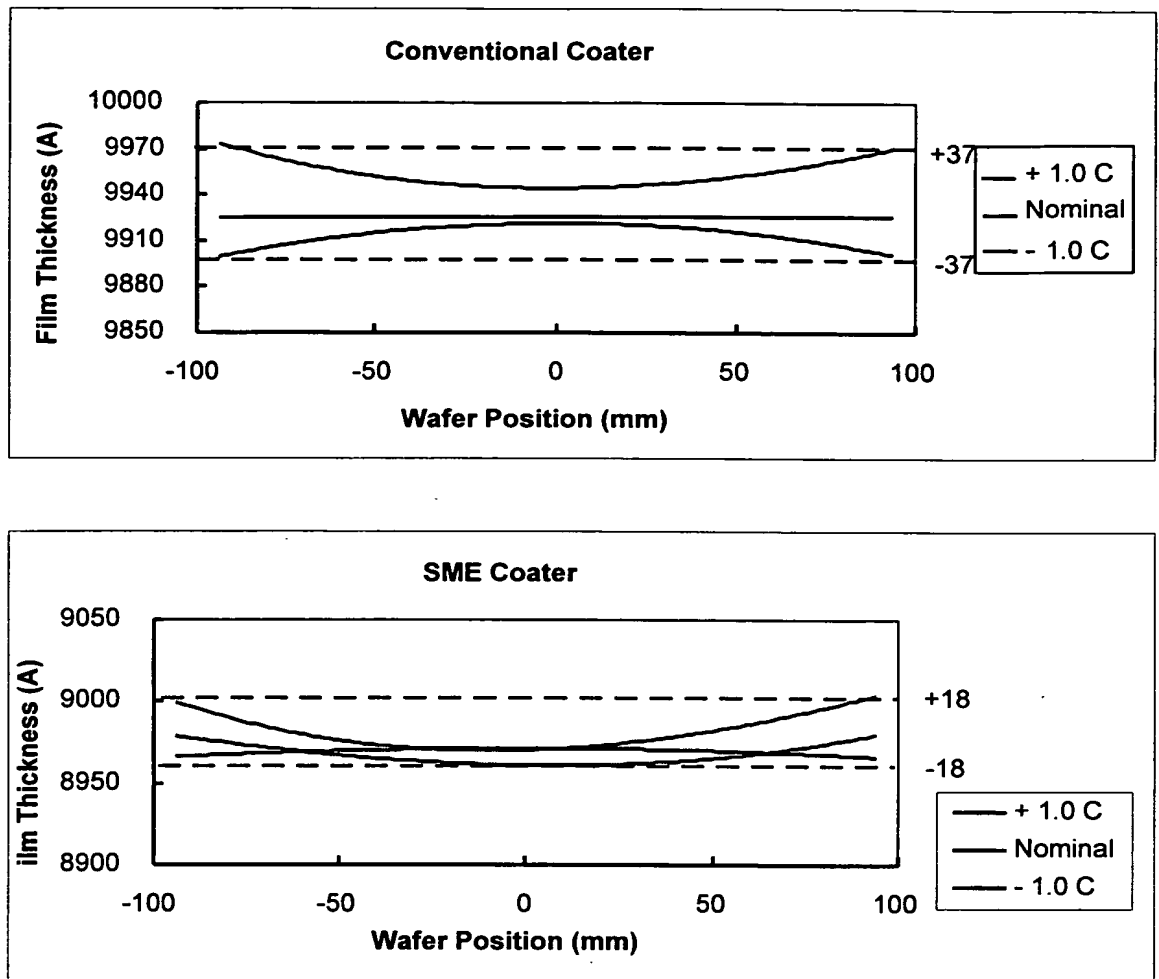


Figure 7: Chill plate temperature latitude comparison of the invention (SME) and conventional coat systems for 200mm wafers. The SME coater chill plate temperature latitude of film uniformity is 43% wider than that of a conventional coater.

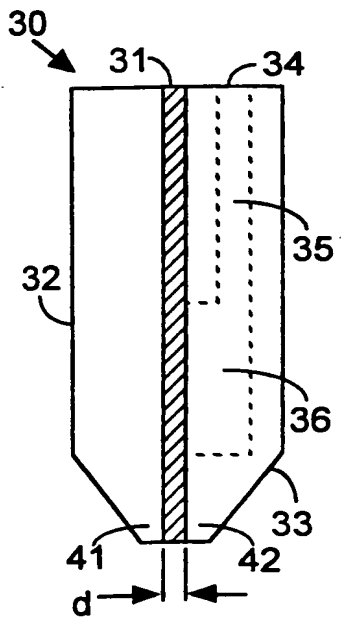


FIG. 8

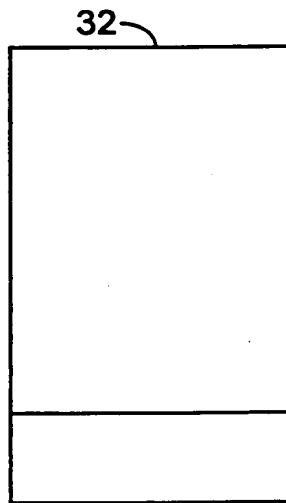


FIG. 9

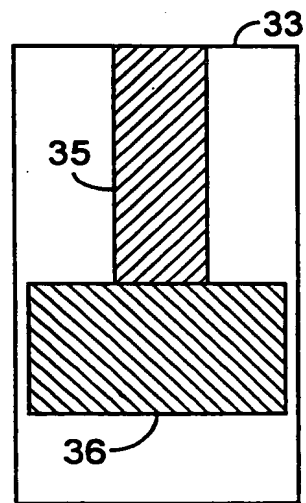
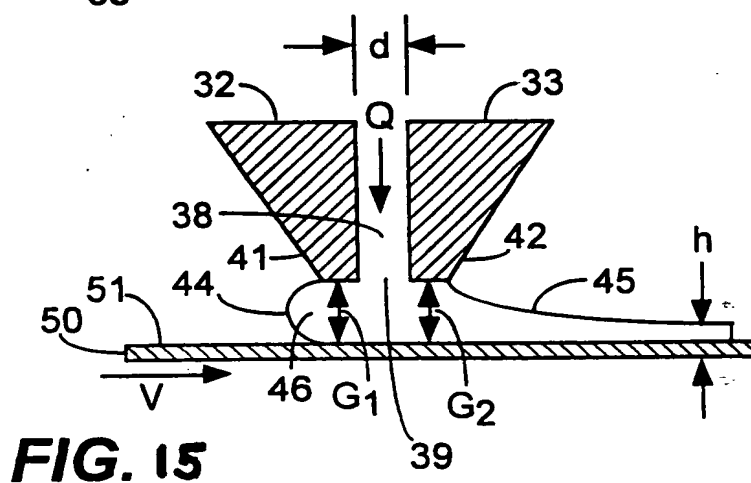
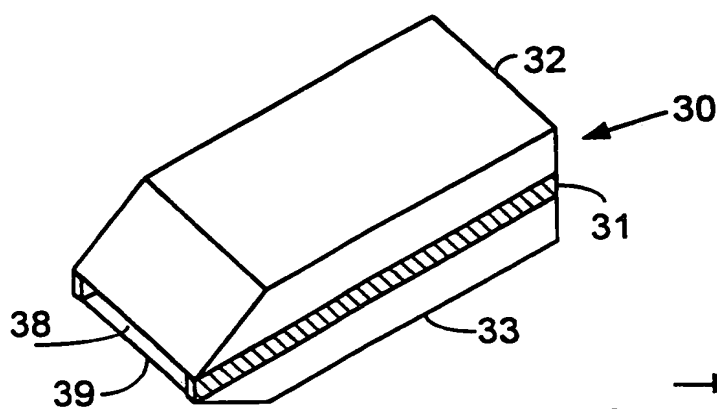
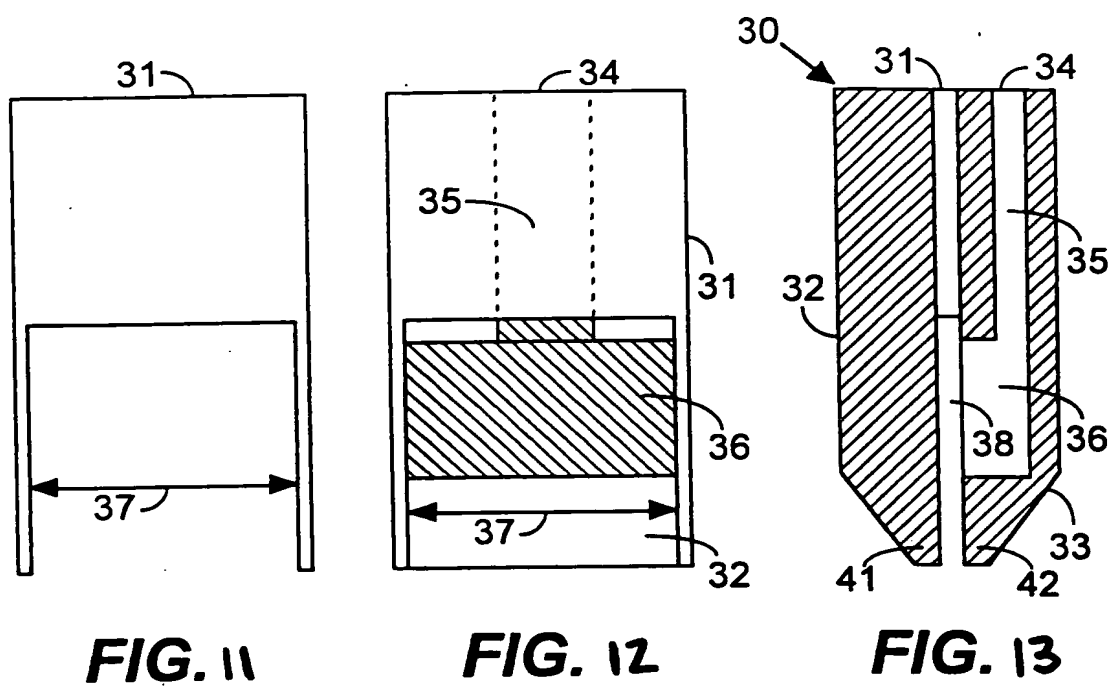


FIG. 10



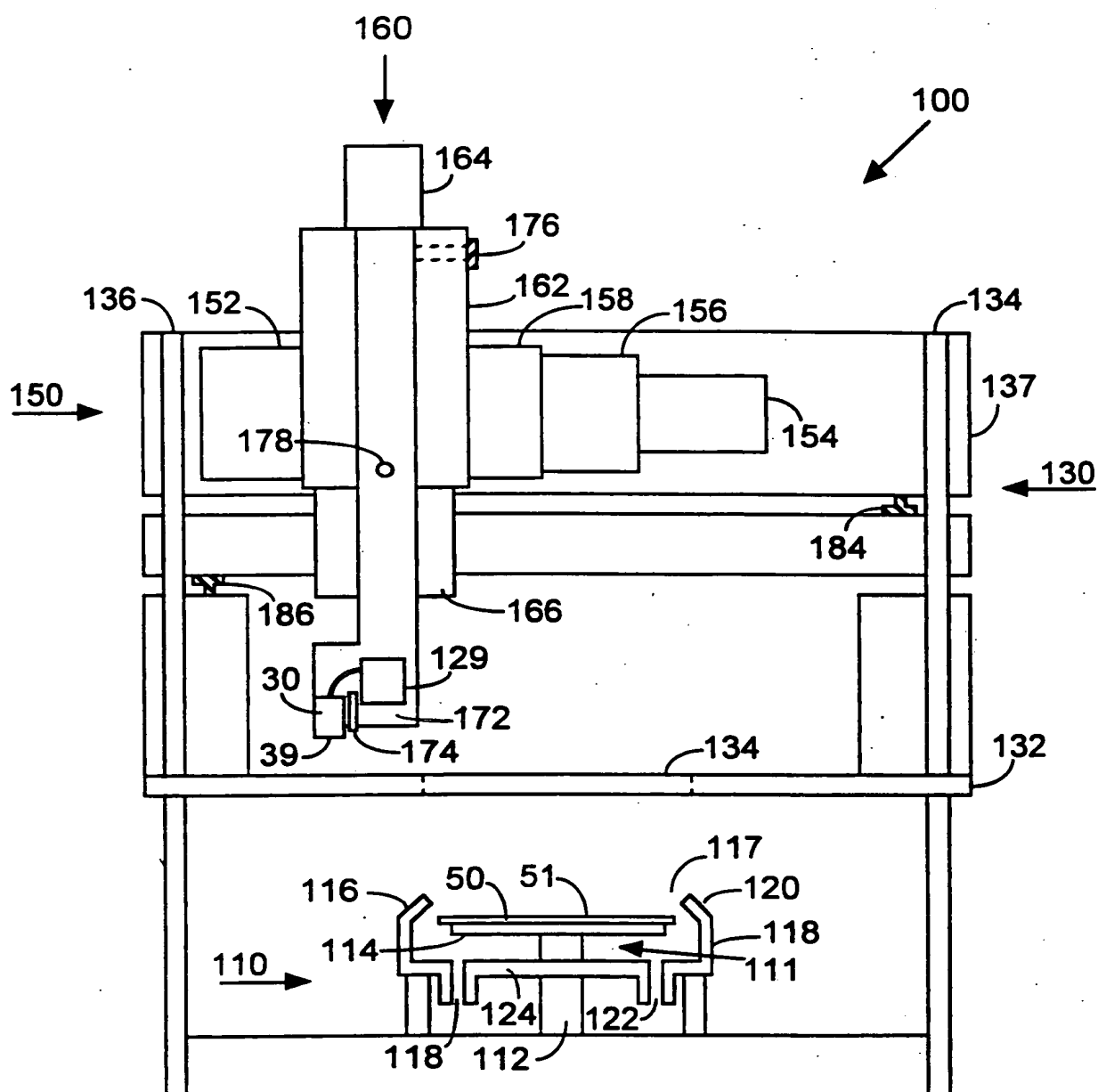


FIG. 16

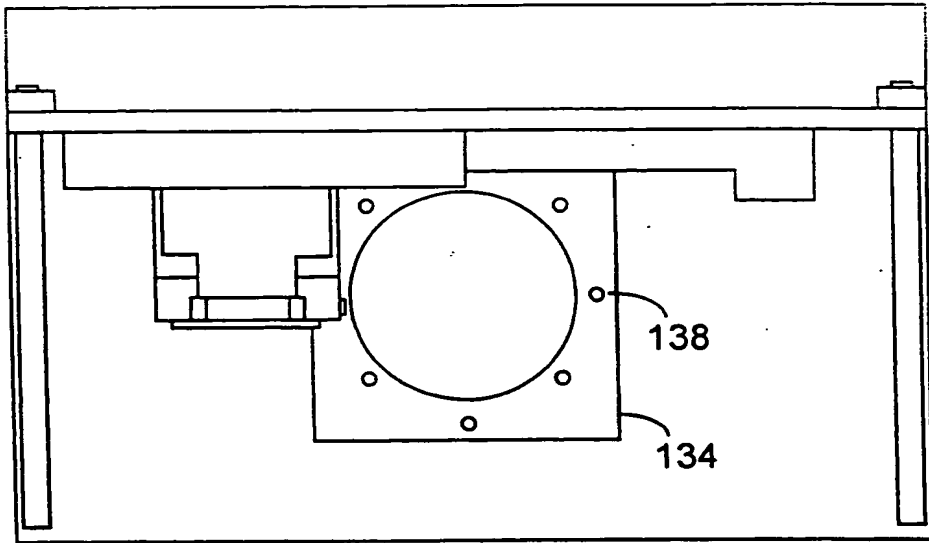


FIG. 17

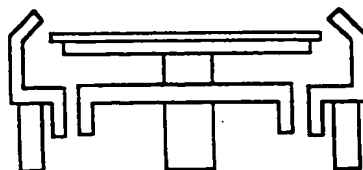
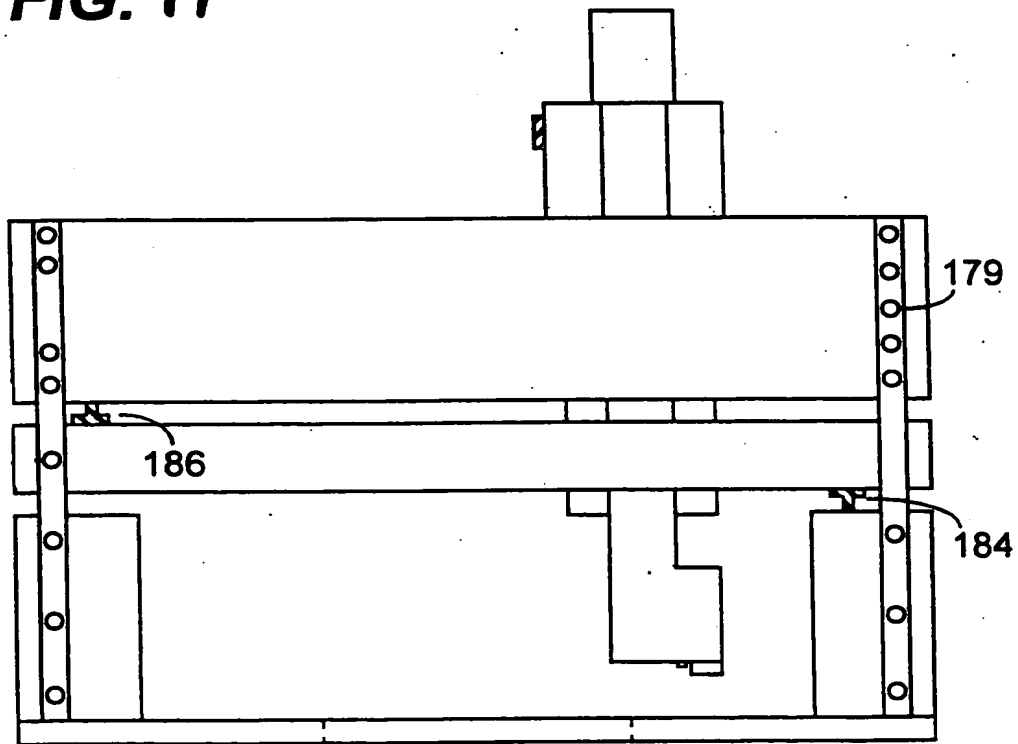
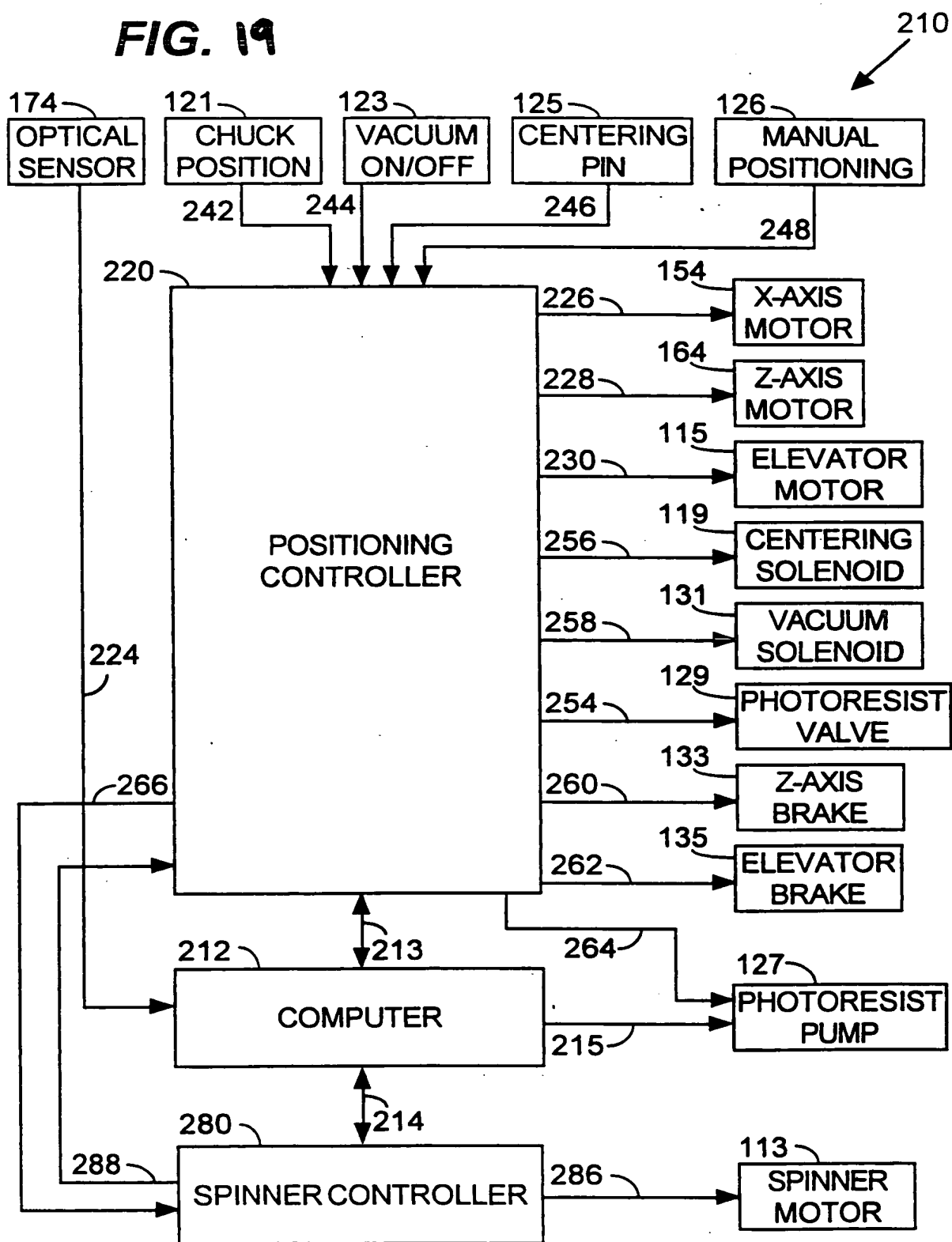


FIG. 18

FIG. 19



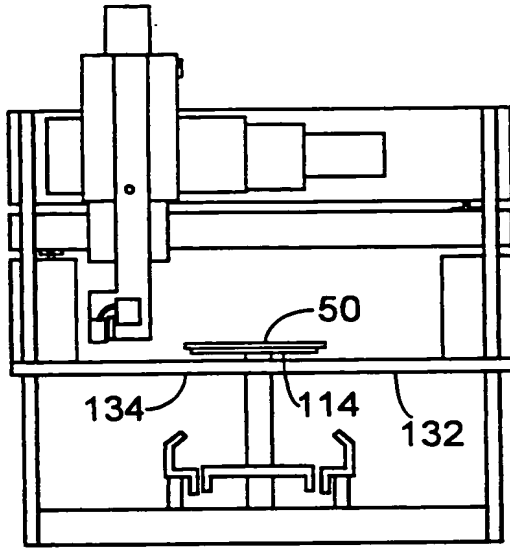


FIG. 20

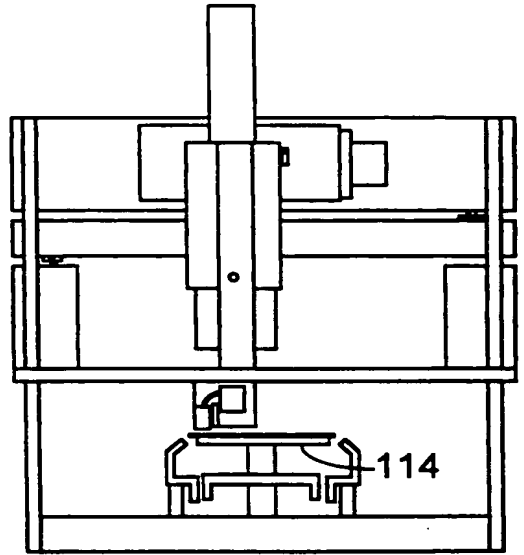


FIG. 21

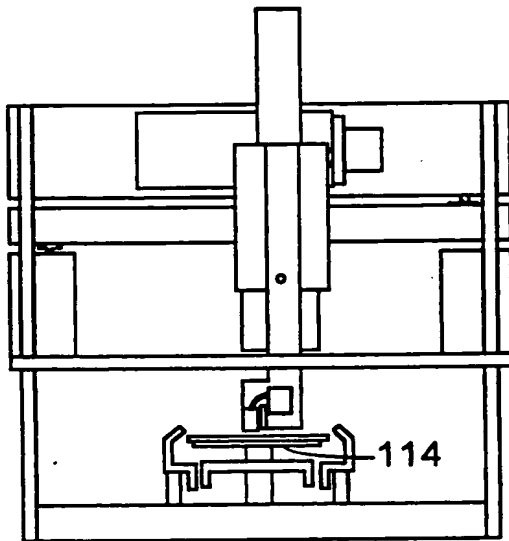


FIG. 22

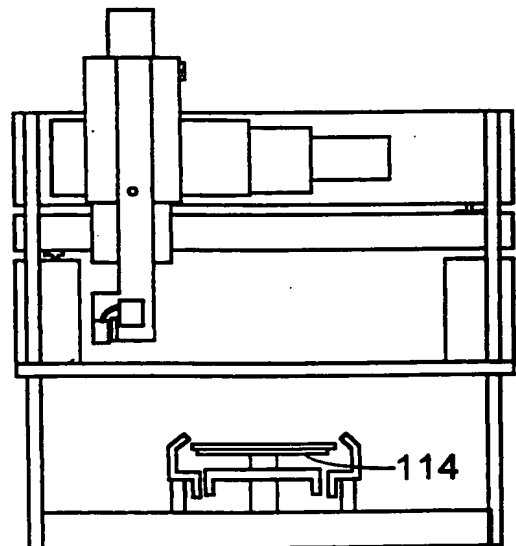


FIG. 23

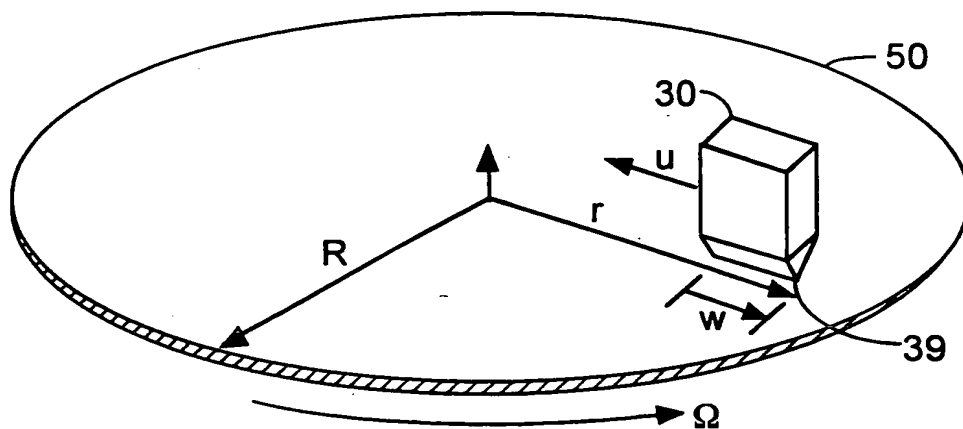


FIG. 24

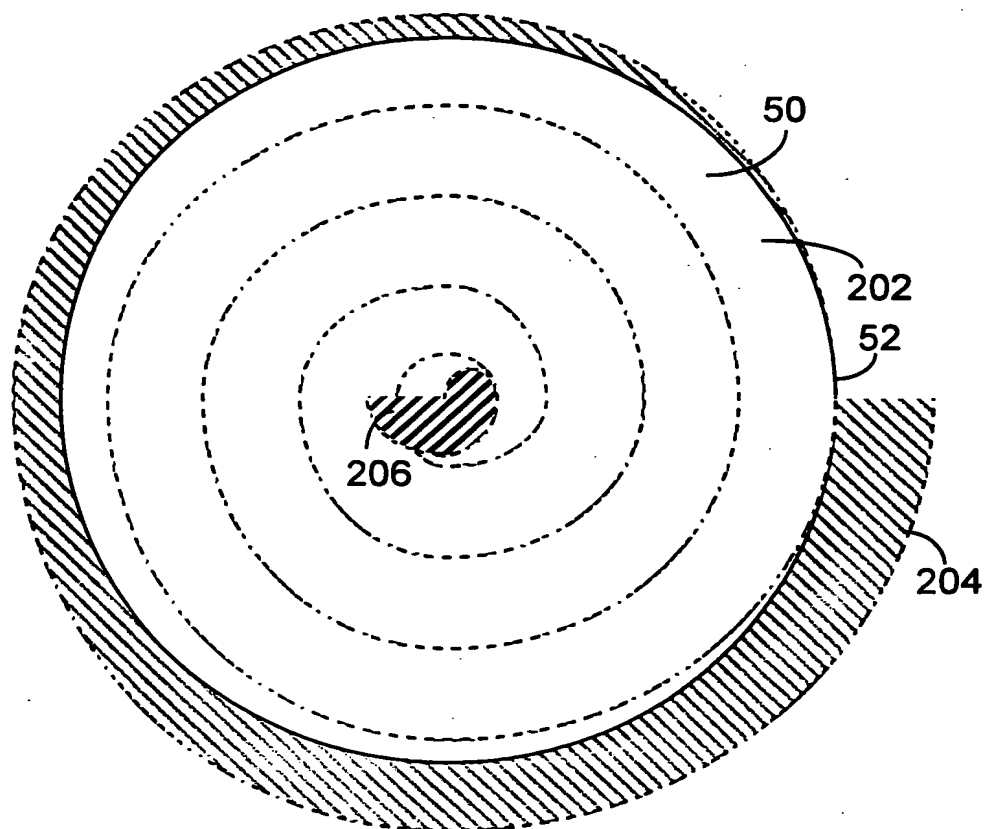


FIG. 25